Overview

PWR-10001 is a power distribution module designed with the widely used XT30 connector.

Features

- x1 XT30 input
- x7 XT30 outputs
    - 6 standard outputs
    - 1 daisy-chain output
- Max current: 30A continuous
- Inter-board daisy-chain connectivity
- Clear identification of wire polarity to prevent errors
- Small form factor
- Designed, manufactured, tested, and shipped from the USA

Kit Includes

- PWR-10001
- Enclosure

Typical Applications

- Robotic competitions (FRC, FTC, VEX, etc.)
- RC projects (cars, trucks, boats, etc.)
- Other hobby projects

Figure 1: PWR-10001

Description

Power is an essential aspect of any electrical system. Playing With Fusion's XT30 power distribution board makes sharing that power easy. Built with a widespread connector, the XT30 is the ideal way to route power throughout your build. All aspects of the XT30 power distribution board were designed with users in mind. A mounting footprint of 1.5" by 0.875" reduces installation difficulty. The small footprint fits anywhere it is needed. With 6 output channels, the rats' nest of wires will disappear. If more channels are needed, multiple boards can be daisy-chained together (see Figure 2).

Figure 2: Daisy-chained modules

Electrical Information

- Max input current: 30A continuous
- Max total output current: 30A continuous

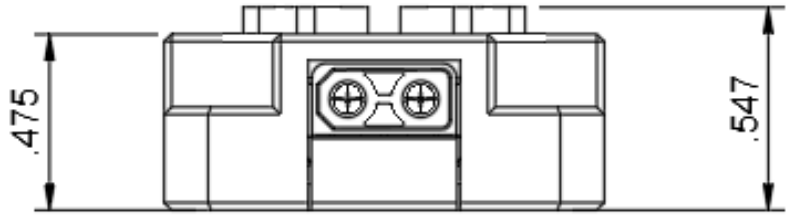
Application & Guide

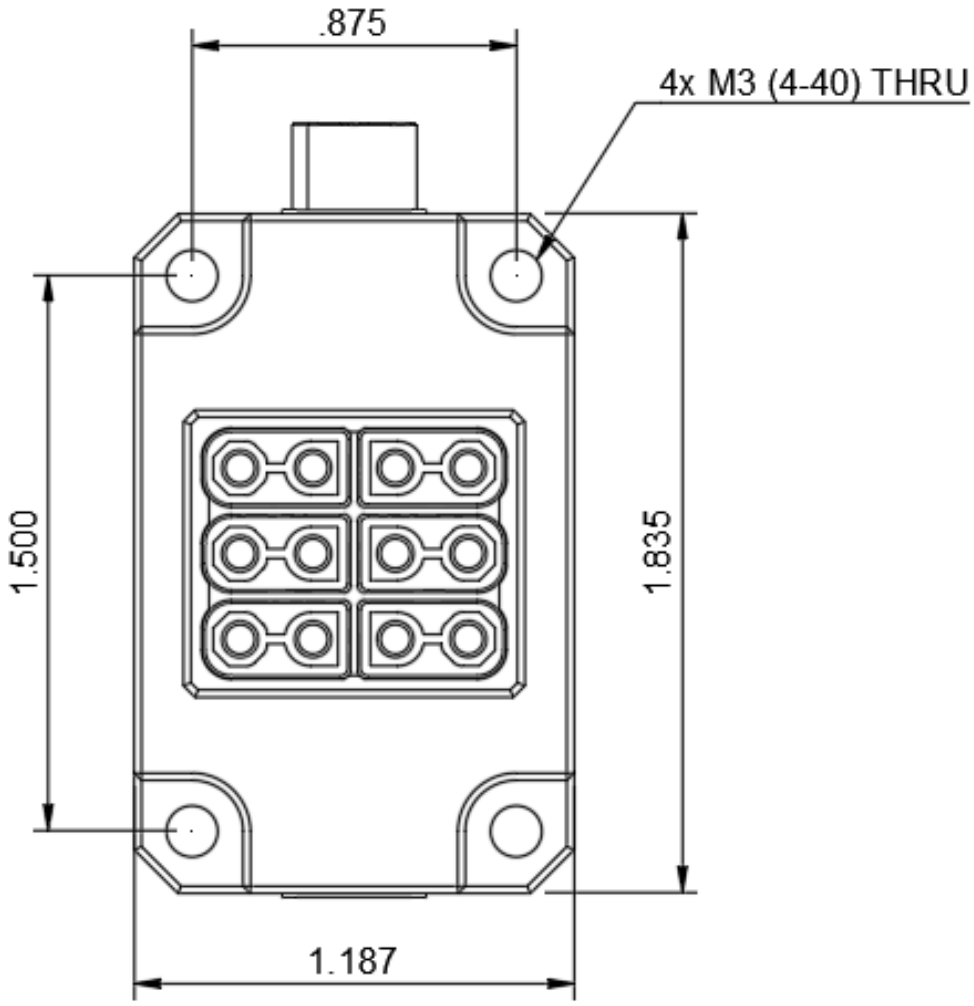
To use PWR-10001, no setup is required. Just connect power. See the implementation in action on Playing With Fusion's YouTube channel.

Ordering Options & Related Parts

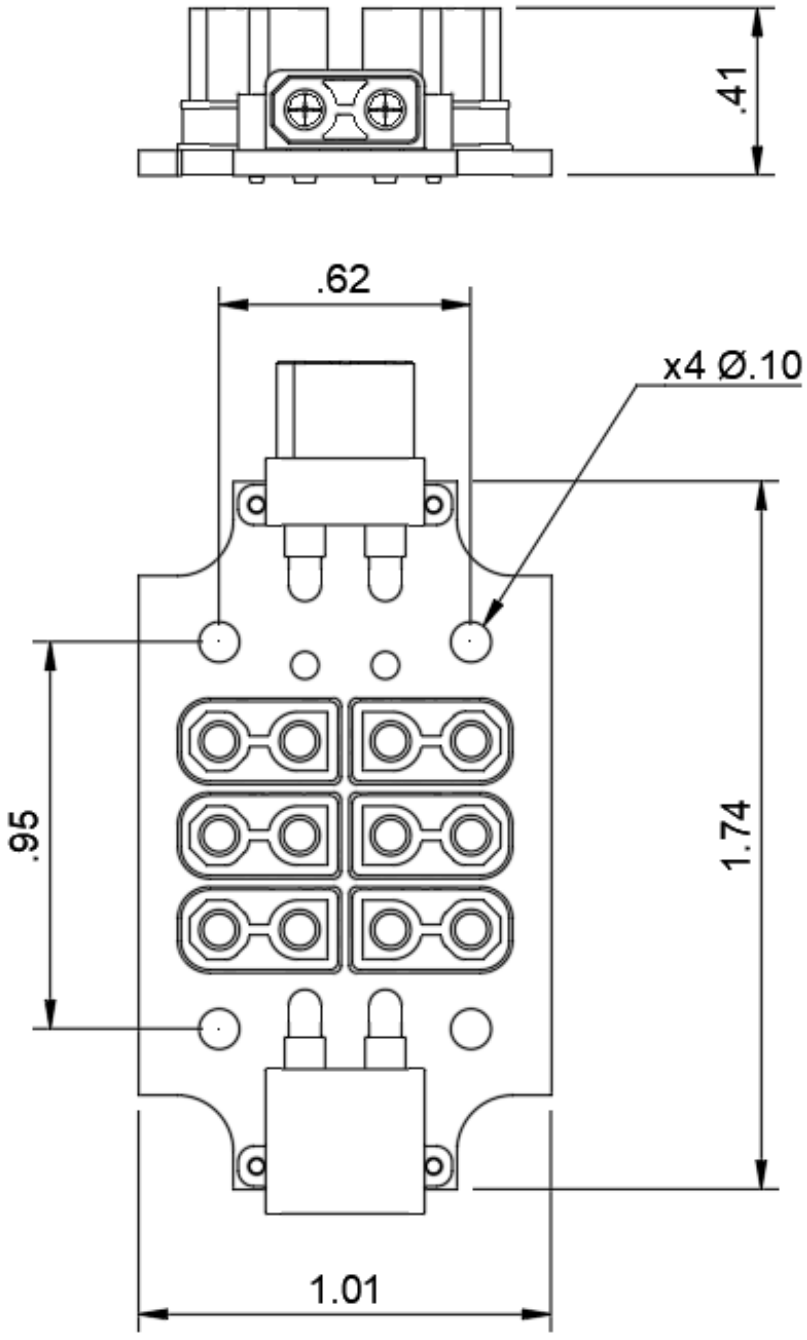
PWR-10002: a different footprint of the XT30 power distribution module
PWR-20001: PTC Fused Sensor Power Distribution
IFB-10013: CAN Inline 2-way splitter
IFB-10014: CAN Inline 3-way splitter
IFB-10015: CAN "Y" 2-way splitter
IFB-10016: CAN "Y" 3-way splitter

Appendix 1: Mechanical Drawing of Enclosure





Appendix 2: Mechanical Drawing of PCB



Revision History

Date	Author	Notes
10/30/2024	N. Johnson	Initial creation